CUSP2CT:

Connecting Underrepresented Populations to Clinical Trials

Virtual Joint BSA-NCAB Board Meeting

CENTER TO REDUCE CANCER HEALTH DISPARITIES

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CUSP2CT: A Timely Concept

ENDING STRUCTURAL RACISM

Ending Structural Racism

For NIH Sta

For NIH Extramural Applicants and Awardees

Health Equity Research

Scientific Workforce Diversity

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- NIH and NCI are united in efforts to end structural racism and racial inequities in biomedical research
- President Biden and Dr. Biden emphasized the importance of addressing cancer health disparities in R/E minority populations
- Outstanding need for outreach/education interventions to address key issues that affect diversity in research and especially in clinical trials
- CUSP2CT will advance an integrated and culturally appropriate approach to address key issues that affect diversity in clinical trials



















CUSP2CT Populations

Underrepresented Populations:

Racial/ethnic minority populations (AA/Bs, AI/ANs, Asians, H/Ls, NH/OPIs)



Minority Accrual to Clinical Trials (CTs) Has Improved: But Not Enough

Minority Accrual to NCI's NCTN and NCORP CTs (All Phases, %) and US Demographic data*

R/E Minority Population	1999	2019	U.S. Population Demographics- 2019
Black or African American	8%	11%	13.4%
Hispanic or Latino	4%	10%	18.5%
Asian	2%	4%	5.9%
American Indian and Alaskan Native	0.3%	0.5%	1.3%
Native Hawaiian and Other Pacific Islander	0.2%	0.3%	0.2%
More than One Race	0.1%	0.6%	2.8%
Total	14.6%	26.4%	42.1%

Phase 3 Accrual data for FY 2019 and FY 2019

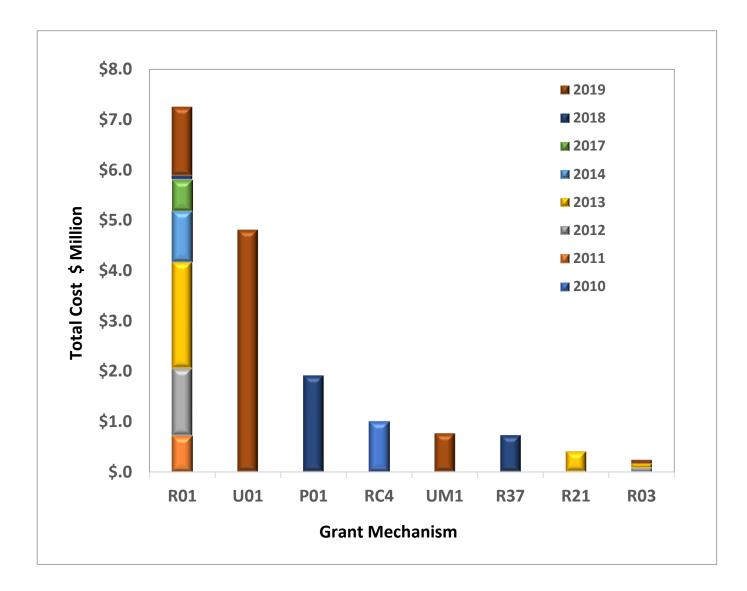
	1999	2019
Accrual of Minority	14%	27%
Patients to Phase III Trials		



^{*}Sources: Dr. Worta McCaskill-Stevens, BSA/NCAB, June 15, 2020 U.S. Census Bureau, QuickFacts- Race and Hispanic Origin, July 1, 2019

Portfolio Analysis

- Portfolio analysis of NCI-funded grants focused on clinical trials (CTs) and underrepresented populations
- 24 grants totaling cost of \$17.1M, mostly
 R01 mechanism (\$7.2M)
- NCORP and NCTN sites prominent, as well as the Minority-Based NCORP Program
- While many of these grants were focused on underrepresented populations and clinical trials, there remains a gap within the NCI portfolio on studies that integrate best practices and establishing connections within the community



CUSP2CT: Enhancing Existing NCI CT Programs

National Clinical Trial Network (NCTN)

Coordinates and supports cancer clinical trials at more than 2,200 sites

NCI's Community Oncology Research Program (NCORP)

CT conduction and care delivery:
7 Research Bases and 46 Comm Sites
& 14 minority sites

Experimental
Therapeutics Clinical
Trials Network
(ETCTN)

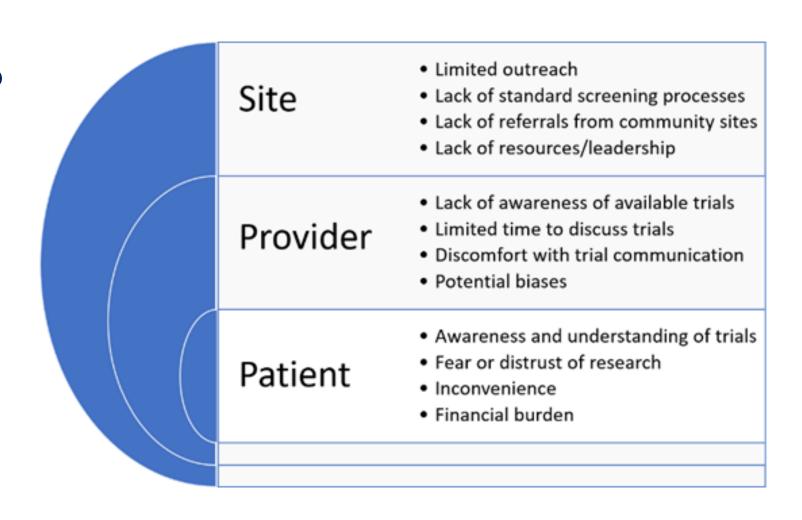
Conducting earlystage trials of cancer treatment therapies Community Outreach and Engagement (COE)

Embedded within CCs, addresses cancer concerns in respective catchment areas

CUSP2CT: Enhances CT participation among R/E minority populations through a partnership of Community Health Educators (CHEs)/ Lay Health Advisors (LHAs), CT Coordinators (CTCs), and referring providers (PCPs and Oncologists)

Multilevel Barriers to CT Referral of R/E Minority Patients

- There are multiple barriers at different levels that keep R/E patients from being referred to CTs
- It is necessary to address barriers at all levels to impact referral, and future recruitment into CTs using an integrated team approach





Referral Challenges in R/E Minority Populations

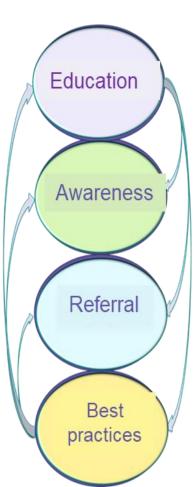
- Lack of information about available CTs
- Long-standing fear, apprehension, and skepticism
- Doctors may not mention clinical trials as an option for cancer care
- Different cultural values and beliefs that may be different than principles of Western medicine
- Language or literacy barriers
- Additional access problems: time, distance, and costs

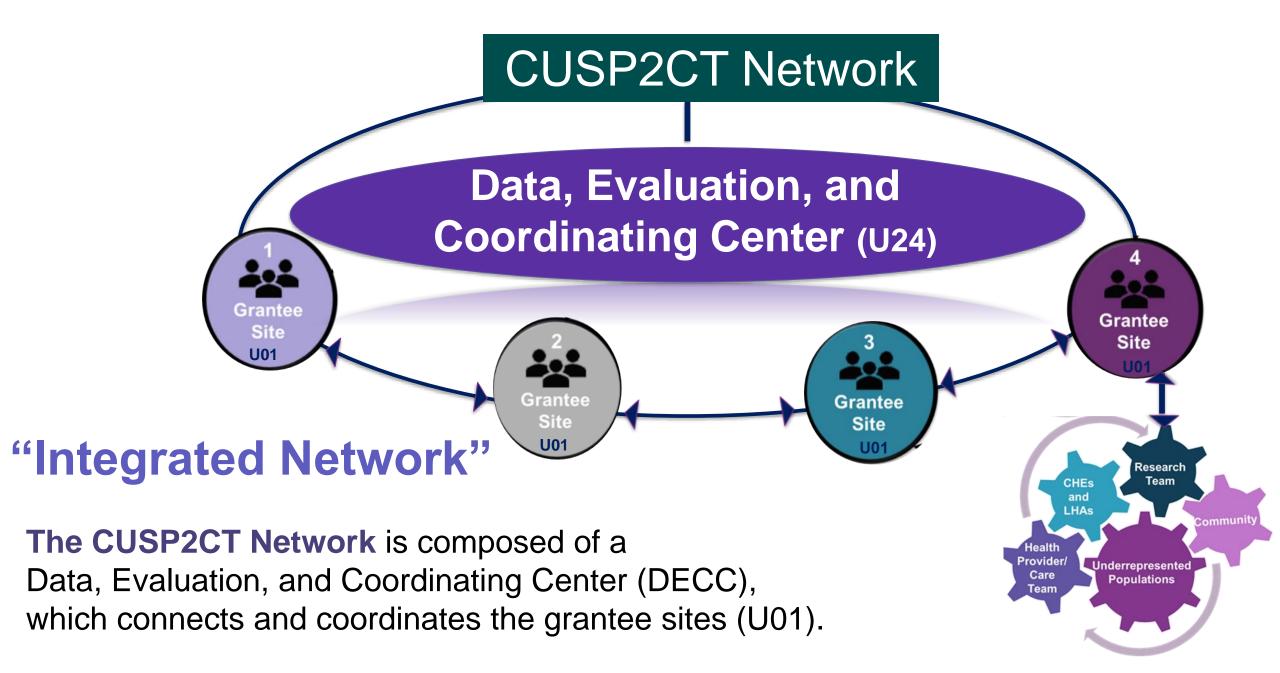
If R/E minority populations are not engaged and educated about CTs, they will not participate in CTs!

CUSP2CT Purpose and Objectives

Purpose: To implement and evaluate multi-level and culturally tailored outreach and education interventions with the primary goal to increase referral of racial/ethnic (R/E) minority populations to NCI-supported clinical trials.

- Educate R/E minority populations about NCI-supported clinical trials utilizing LHAs, CHEs, in the integrated team
- Engage primary care and referring providers to increase clinical trial awareness to refer R/E minority populations to NCI-supported clinical trials utilizing LHAs, CHEs, in the integrated team
- Enhance referral of R/E minority populations to NCI-supported clinical trials at the site, provider, and patient levels utilizing LHAs, CHEs, in the integrated team
- Address barriers and facilitators that impede and support pathways by which R/E minority populations access NCI-supported clinical trials at the site, provider, and patient levels. Identify and disseminate best practices





Areas of Research Interest

- Test the effectiveness of interventions designed to educate R/E minority communities about CTs generally and the importance of inclusion into CTs
- Encourage and facilitate referral of R/E minorities who are eligible for a specific clinical trial
- Address implicit bias and strengthen communication skills of primary care and referral providers
- Develop referral pathways to clinical trials that would require minimal resource investment on the part of health care organizations
- Test the effectiveness of using virtual/technology-driven interventions, initiated during the COVID-19 pandemic, to increase referral, recruitment, and consent of R/E minority patients to NCI-supported CTs



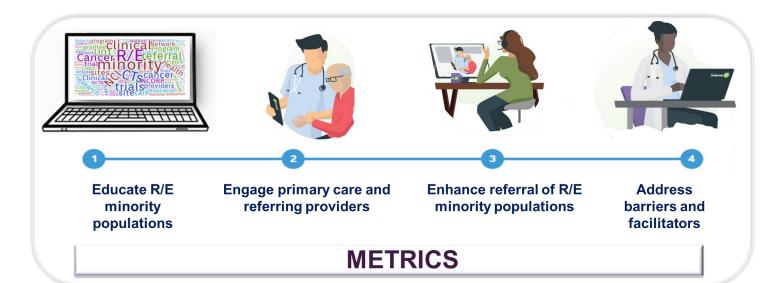
Program Expectations of each Grantee Site (U01)

- Leverage existing partnerships and foster new partnerships with community-based organizations to collaborate in tandem with CHEs/LHAs
- Leverage existing partnerships and foster new partnerships with referring providers to enhance the identification of potential R/E minority referrals to CTs
- Identify available and appropriate CTs that have a strong potential for positively impacting cancer health disparities
- Establish baseline data regarding community members awareness and knowledge of CTs as well as referring providers' referral of R/E minority patients to CTs
- Implement, and evaluate novel multilevel interventions to enhance (R/E) diversity in NCI-supported (CTs)



Elements of a Competitive Application

- Cancer Type and Target Population
- Integrated Site Team
- Community Intervention
- Provider Intervention
- Referral System
- Identification of Best Practices



Setting

NCI-supported CT Site Federally Qualified Health Center Community Hospital or Clinical Center

Community

Community Leaders
Community Advisory Board
Advocates

Large AA population w/ high rates of late-stage CRC

Personnel

CHEs
LHAs
CT Coordinator
Health Care Providers (PCP and
Referring Providers)
CT Research Team

Intervention Focus Areas

Education and Training of CT Personnel and Health Care Providers to Raise CT Awareness
Education of R/E Patients on the

Education of R/E Patients on the importance of CTs and participation in CTs Physician Referral and Best Practices



Data, Evaluation, and Coordinating Center (U24)

- Receive, store, and analyze data from the U01 grantee sites
- Identify and/or develop common metrics and measures to be collected by all U01 grantee sites to facilitate a CUSP2CT program evaluation
- Assist sites in evaluating their specific interventions and making changes as appropriate at the patient, provider, and site levels
- Develop an overall program evaluation plan and conduct an evaluation of the CUSP2CT network
- Disseminate results for all implemented interventions within and outside of the CUSP2CT network, with sufficient detail to allow non-grantee sites to replicate the evaluated interventions
- Encourage the replication and scale up of effective interventions and best practices

CUSP2CT Select Evaluation Metrics for Objectives

Objectives	Metrics	Data Sources		
1. Educate R/E minority populations	 Number and types of CT-related outreach and education activities conducted with R/E minority community members, and number of persons reached. Demonstrated knowledge of CTs in persons from R/E minority Populations, at pre- and post-education activity. 	 CHE and LHA logs/reports; key informant interviews Focus Groups/Surveys 		
2. Engage primary care and referring providers	 Number and types of activities designed to educate primary care and referral providers about NCI-supported clinical trials Health care providers' knowledge and awareness of implicit bias 	Clinic and CT dataProvider surveys and focus groups		
3. Enhance referral	 Number of referrals to NCI-supported clinical trials, by trial type (e.g., prevention, screening, treatment) Number of provider referrals of R/E minority populations to NCI-supported clinical trials Tracking successful accruals 	EMR/EHRReferral logsAccrual logs		
4. Address barriers and facilitators that impede and support pathways	 Identification and clear description of pathway(s) to access CTs (i.e., a "roadmap") Identification of best practices 	 CHE/LHA logs/reports Cross-site comparisons of activities/processes 		

Budget

Funding	1 Year			5 Years				
Funding	1 Site		4 Sites		1 Site		4 Sites	
Mechanism	DC	TC	DC	TC	DC	TC	DC	TC
U01	\$450 K	\$765 K	\$1.80 M	\$3.06 M	\$2.25 M	\$3.83 M	\$9.00 M	\$15.30 M
U24	\$350 K	\$595 K			\$1.75 M	\$2.98 M		

Funding for CUSP2CT (U01 and U24 at for 1- and 5-year periods). TC assumes 70% F&A cost/per year.

- Up to four (4) U01 Grantee Sites will be awarded. The project period is for 5-years, with \$450K direct costs (\$765K total costs)/award/year. The budget will encompass Fiscal Years 2022-2026.
- One (1) U24 grant will be awarded. The project period is for 5-years, with \$350K direct costs (\$595K total costs)/year.

The estimated total costs per year are \$3.67 M. The estimated total costs for the five-year project period are \$18.28M.

Key Aspects of CUSP2CT

- Use of an integrated network to address several levels of challenges to CT referral, enrollment and retention
- Increased community engagement education, awareness, and CT referral through CHEs/LHAs
- Implement and adapt innovative strategies for CT participation of R/E minority populations
- Leverage existing programs/research





CUSP2CT Key Contributors

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- National Institute on Minority Health and Health Disparities: Adelaida Rosario
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cancer.gov/crchd